Circular No. 8858

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COMET C/2007 O1 (LINEAR)

An apparently asteroidal object discovered by the LINEAR survey (discovery observation tabulated below), and posted on the Minor Planet Center's 'NEOCP' webpage, has been found to show cometary appearance by several CCD observers. L. Donato, E. Guido, A. Lepardo, and G. Sostero (Remanzacco, Italy, 0.45-m *f*/4.4 reflector) write that twenty stacked 60-s unfiltered exposures obtained on July 17.9 UT show a coma nearly 12″ in diameter of red mag 16.7–17.0. G. Lombardi and E. Pettarin (Farra d'Isonzo, Italy, 0.40-m *f*/4.5 reflector) report that images obtained by F. Piani and themselves on July 17.9 show a diffuse coma of diameter $\sim 10''$ with a tail $\sim 20''$ long in p.a. 315° (though difficult detection among the Milky Way stars). P. Birtwhistle (Great Shefford, Berkshire, England, 0.40-m *f*/6 Schmidt-Cassegrain reflector) notes that his images from July 17.9 show that the object appears diffuse and circular, with a concentrated center and diameter 10″, adding that no tail was visible, but that such detection is very much hampered by the rich star field. M. Pietschnig (Alter Satzberg, Vienna, Austria, 0.35-m *f*/7 Schmidt-Cassegrain reflector) reports that his frames from July 17.9 show a faint coma of diameter $\sim 20''$. V. S. Casulli (Colleverde di Guidonia, Italy, 0.40-m *f*/4.5 reflector) adds that images from July 18.04 and 18.06 show a coma nearly 9″ in diameter, elongated toward p.a. 330°.

2007 UT	α_{2000}	δ_{2000}	Mag.
July 17.22525	$19^h06^m37^s.31$	$-17^\circ23'57''.3$	17.2

The available astrometry (including prediscovery LINEAR observations from July 15 and 16), the following preliminary orbital elements, and an ephemeris appear on *MPEC* 2007-O10.

$$\begin{array}{lll} T = 2007\ \text{July}\ 1.763\ \text{TT} & \omega = 167^\circ.527 & \\ & \Omega = 116.226 & \Big\}\ 2000.0 \\ q = 2.90503\ \text{AU} & i = 24.401 & \end{array}$$

COMET P/2007 N2 = P/2002 O5 (NEAT)

The recovery announced on *IAUC* 8856 was only as a result of the incidental LINEAR astrometry (thus, accidental); the other observers provided 'confirming' astrometry as a result of a surprise posting of an ephemeris on the 'NEOCP' webpage, unbeknownst to the Central Bureau.

2007 July 18 *Daniel W. E. Green*